

XLVII.—*Descriptions of new Species of Fishes in the British Museum.* By Dr. ALBERT GÜNTHER, F.R.S. &c.

Crenidens macracanthus.

D. $\frac{12}{10}$. A. $\frac{3}{10}$. L. lat. 48. L. transv. 5/11.

Very similar in form to *C. Forskalii*; but with much stronger spines in the vertical fins, and with somewhat larger scales. Of the dorsal spines the fourth, fifth, and sixth are the longest, not much less than one half of the height of the body, and two thirds of the length of the head. The second anal spine exceedingly strong, as long as the head without snout. Incisors very broad, twelve in the upper as well as in the lower jaw*. Three series of scales on the cheek. Coloration uniform silvery.

Madras (Surgeon-Major F. Day). Length of specimen $6\frac{1}{2}$ inches.

Chelmo trochilus.

D. $\frac{11}{27}$. A. $\frac{3}{18}$. L. lat. 55.

Body as high as long, head and caudal fin excluded. The length of the snout is contained twice and one third in that of the head. Anterior part of the soft dorsal and anal produced into an acute point, the hind margins of these fins being vertical. Caudal fin truncated. Silvery; head and body with five black transverse bands: the first is the ocular band, much narrower than the orbit, extending from the nape to the interoperculum, above the eye it is edged with white; the second, rather broader than the first, runs from the three anterior dorsal spines over the operculum across the chest, in front of the ventrals; the third, twice as broad as the second, from the sixth, seventh, and eighth to the abdomen; the fourth between the pointed angles of the dorsal and anal; the fifth narrow, round the middle of the free portion of the tail. An indistinct and incomplete cross band between the first and second, and another between the second and third bands. Some irregular blackish spots in the interspaces. Hind margin of the dorsal and anal blackish. Caudal uniform reddish. Ventrals black, with yellowish spine.

Australia (purchased). Seven inches long.

* To judge from other Sparoid fishes, it is possible that also in this genus the width of the incisors changes with age, young examples having generally comparatively broader incisors.

*Equula elongata.*D. $\frac{8}{16}$. A. $\frac{3}{14}$.

The height of the body is nearly one fifth of the total length (without caudal), the length of the head one fourth. Eye nearly as long as the snout and as the postorbital part of the head. A minute spine above the anterior margin of the orbit; præopercular margins not serrated. Caudal fin deeply emarginate. Upper half of the body greenish, irregularly marbled with darker; two brown spots at the root of the caudal. Lower half silvery.

North Celebes (Dr. A. B. Meyer). Length $2\frac{3}{4}$ inches.

RHAMPHOCOTTUS (g. n. Cottid.).

Head exceedingly large, compressed, with the snout produced into a short, narrow beak, the feeble lower jaw being received within the upper. Eyes lateral. Body small, compressed, covered with prickles. Two dorsal fins, of moderate height; pectorals with nearly all the rays simple. Ventrals thoracic, three-rayed. Jaws and vomer with villiform teeth; no teeth on the palate.

Rhamphocottus Richardsonii.

D. 6 | 13. A. 7. C. 11. P. 14. V. 3.

The head is as long as the body without caudal fin; it is nearly entirely covered with bone or rough hard skin. The narrow pointed snout is twice as long as the eye, the diameter of which is contained five times and a half in the length of the head. The upper surface of the head is narrow, concave, with a swollen edge on each side. Its armature consists of a pair of small spines on the snout, in front of the eye, of a small superciliary spine above the hind margin of the orbit, an obtuse occipital spine, a rather long spine at the angle of the præoperculum, and a scapular spine.

The jaws are feeble, the lower fitting within the upper; the cleft of the mouth lateral, not extending to the front margin of the orbit.

The entire body is covered with prickles vertically projecting, and terminating in two or three minute hooklets.

Dorsal fins rather low, and the spines of the first very feeble; caudal rounded, of moderate length. Pectorals large, but not quite extending so far backwards as the ventrals, which reach beyond the anterior anal rays.

Light brownish, marbled with darker; several brown cross bands, edged with whitish on the crown of the head.

A single specimen, $2\frac{1}{2}$ inches long, and 11 lines high at the nape of the neck, from Fort Rupert, North America. Obtained by purchase.

Notothenia Veitchii.

D. 6 | 32. A. 28. L. lat. ca. 88.

The length of the head is contained three times and a half in the total (without caudal), the height of the body five times and one third. Head elongate, like the body, with the snout pointed, and rather longer than the eye, the diameter of which is two ninths of the length of the head. Lower jaw slightly projecting beyond the upper; maxillary reaching beyond the front margin of the orbit. Dorsal spines feeble. Upper parts densely marbled with dark brown, lower yellowish.

Several specimens, $3\frac{1}{2}$ inches long, were obtained in the Chonos Archipelago by one of the collectors of Harry Veitch, Esq., who presented them to the British Museum.

Agonostoma globiceps.

D. 4 | $\frac{1}{9}$. A. $\frac{3}{10}$. L. lat. 43. L. transv. 14.

The height of the body is contained thrice and three fourths in the total length (without caudal), the length of the head four times and a half. Snout very short, obtuse and rounded, once and a half as long as the small eye, the diameter of which is one fifth of the length of the head. Orbit surrounded by a narrow adipose eyelid. Forehead very broad and convex. The maxillary extends somewhat beyond the front margin of the eye. Upper jaw with a narrow band of fixed teeth; the lower with a broader band, which is interrupted in the middle; vomerine teeth forming a large triangular patch; palatine teeth in a narrow band. *Lower lip with trenchant margin.* The first dorsal spine strong, compressed, two thirds as long as the head; its root is midway between the end of the snout and the last anal ray. Caudal fin emarginate. Coloration uniform.

One specimen from Myzantla (Vera Cruz), $10\frac{1}{2}$ inches long. Purchased.

Fundulus Bermuda.

D. 14. A. 12. L. lat. 35. L. transv. 13.

The height of the body is one fourth of the total length (without caudal), the length of the head rather less than two sevenths. Snout short, not longer than the eye, with the lower jaw ascending and projecting beyond the upper. The width of the interorbital space is contained twice and one third in the length of the head, the diameter of the eye four times. The origin of the dorsal fin is opposite to the sixteenth scale of the lateral line, and midway between the root of the caudal

and the præopercular margin. The first anal ray corresponds to the fourth or fifth of the dorsal fin. Anal fin much higher than long. Brownish olive, with numerous dark greenish indistinct cross bands (in the male).

A single male specimen, 3 inches long, has been sent by J. Matthew Jones, Esq., from the Bermudas.

Mollienesia Jonesii.

D. 12. A. 10. L. lat. 29. L. transv. 9.

Female. The height of the body is two sevenths or one fourth of the total length (without caudal), the length of the head one fourth. The diameter of the eye is rather shorter than the snout, one fourth of the length of the head, and one half of the width of the interorbital space. The length of the dorsal fin is one fourth of the distance between the eye and root of the caudal; it is much longer than high. Anal fin small, opposite to the middle of the dorsal. Lateral line none. Brownish, each scale with a deep-black hind margin; a black band between the eye and scapula; a round black spot on the upper half of the root of the caudal. Dorsal fin with two or three series of black spots; anal with a black line behind and along each ray; the other fins immaculate.

This species was discovered by T. M. Rymer Jones, Esq., in a volcanic lake, Alcohuaca, near Huamantla, in Mexico, 8000 feet above the level of the sea. Several specimens were presented by him to the British Museum: all are females; and the largest exceeds somewhat the length of 3 inches.

XLVIII.—*Final Note on Eozoon canadense*.

By WILLIAM B. CARPENTER, M.D., LL.D., F.R.S.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,

As it is obviously impossible to carry on any discussion without some common basis of agreement, and as Profs. King and Rowney have now made it clear that no such basis can exist between them and myself, it is not my intention to trouble you with any reply to their last Paper.

For (1) my opponents deduce, from their examination of a few specimens of a single Foraminiferal type, what they affirm to be "Foraminiferal impossibilities;" and (2) under the pre-conception thus formed they refuse to credit my statement of an objective fact, viz. the existence of an unmistakable "nummuline tubulation" in a specimen of *Eozoon* which they have not examined.